

IN THE CLAIMS:

Claims 1, 7-21, and 25-56 are pending herein. Claims 22-24 have been canceled herein. Claims 2-6 were previously cancelled. Claims 9, 11-15, 21 and 26-28 have been amended. Claims 31-56 have been added. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Previously presented) A eukaryotic cell for producing a protein of interest, said eukaryotic cell comprising:

a first nucleotide sequence encoding an adenoviral E1A protein;

a second nucleotide sequence encoding an adenoviral E1B protein;

wherein the genome of the eukaryotic cell lacks a nucleotide sequence encoding a structural adenoviral protein and wherein the eukaryotic cell does not express a structural adenoviral protein; and

a recombinant nucleotide sequence in expressible format encoding the protein of interest,

wherein the recombinant nucleotide sequence in expressible format encoding the protein of interest forms part of the genome of the eukaryotic cell, and

wherein the eukaryotic cell is of a human embryonic retinoblast origin.

2-6. (Cancelled).

7. (Previously presented) The eukaryotic cell of claim 1, wherein the first and second nucleotide sequences encoding the adenoviral E1A and E1B proteins are integrated in the genome of the eukaryotic cell and are derived from nucleotides 459-3510 (SEQ ID NO: 33) of an adenovirus 5 genome.

8. (Previously presented) The eukaryotic cell of claim 1, wherein the first nucleotide sequence encoding the adenoviral E1A protein is regulated by a human phosphoglycerate kinase (PGK) promoter.

9. (Currently amended) The eukaryotic cell of claim 1, wherein the eukaryotic cell is of a PER.C6TM-cell ~~origin~~ as deposited under ECACC no. 96022940 origin.

10. (Previously presented) The eukaryotic cell of claim 1, wherein the protein of interest is a human protein.

11. (Currently amended) The eukaryotic cell of claim 1, wherein the ~~proteinaceous substance~~ protein of interest comprises a variable domain of an immunoglobulin.

12. (Currently amended) The eukaryotic cell of claim 11, wherein the ~~proteinaceous substance~~ protein of interest is an immunoglobulin.

13. (Currently amended) The eukaryotic cell of claim 12, wherein the ~~proteinaceous substance~~ protein of interest is a monoclonal antibody.

14. (Currently amended) The eukaryotic cell of claim 1, wherein the ~~proteinaceous substance~~ protein of interest is erythropoietin, or a functional derivative, homologue or fragment thereof.

15. (Currently amended) The eukaryotic cell of claim 1, wherein the ~~proteinaceous substance~~ protein of interest is a viral protein other than an adenoviral protein.

16. (Previously Presented) The eukaryotic cell of claim 15, wherein the viral protein is selected from the group consisting of an influenza virus neuramidase, an influenza virus hemagglutinin, an enterovirus protein or an epitope thereof, a herpes virus protein or an epitope thereof, an orthomyxovirus protein, a retrovirus protein, a parvovirus protein, a papovavirus protein, a rotavirus protein, a coronavirus protein, a togavirus protein, a rubella virus protein, an Eastern-equine encephalomyelitis virus protein, a Western-equine encephalomyelitis virus protein, a Venezuelan equine encephalomyelitis virus protein, a hepatitis causing virus protein, a hepatitis A protein, a hepatitis B virus protein, a pestivirus protein, a hog cholera virus protein, a rhabdovirus protein, a rabies virus protein, and antigenic fragments of any thereof.

17. (Previously presented) The eukaryotic cell of claim 1, wherein the recombinant nucleotide sequence encoding the protein of interest in expressible format comprises the sequence encoding the protein of interest under control of a cytomegalovirus (CMV) promoter.

18. (Previously presented) A cell culture comprising the eukaryotic cell of claim 1, together with a suitable medium.

19. (Previously presented) The cell culture of claim 18, wherein the cell culture is a suspension culture.

20. (Previously presented) The cell culture of claim 18, wherein the suitable medium is free of animal- or human-derived serum and animal- or human-derived serum components.

21. (Withdrawn-currently amended) A process for producing a ~~proteinaceous substance~~ protein of interest, the process comprising:

culturing the eukaryotic cell of claim 1 in a suitable medium, thus allowing the eukaryotic cell to produce the ~~proteinaceous substance~~ protein of interest; and

harvesting the ~~proteinaceous substance~~ protein of interest from the eukaryotic cell or the suitable medium.

22-24. (Cancelled).

25. (Withdrawn) The process of claim 21, wherein the first and second nucleotide sequences encoding the adenoviral E1A and E1B proteins are integrated in the genome of the eukaryotic cell and are derived from nucleotides 459-3510 (SEQ ID NO: 33) of an adenovirus 5 genome.

26. (Withdrawn-currently amended) The process of claim 21, wherein the eukaryotic cell is of a ~~PER-C6~~ cell origin as ~~deposited~~ under ECACC no. 96022940 origin.

27. (Withdrawn-currently amended) The process of claim 21, wherein the ~~proteinaceous substance~~ protein of interest is a human protein.

28. (Withdrawn-currently amended) The process of claim 21, wherein the recombinant nucleotide sequence encoding the ~~proteinaceous substance~~ protein of interest in expressible format comprises the sequence encoding the ~~proteinaceous substance~~ protein of interest under control of a CMV promoter.

29. (Withdrawn) The process of claim 21, wherein the suitable medium is free of animal- or human-derived serum and animal- or human-derived serum components.

30. (Previously presented) The eukaryotic cell of claim 1, wherein the protein of interest is a glycoprotein.

31. (New) The eukaryotic cell of claim 9, wherein the protein of interest is a human protein.

32. (New) The eukaryotic cell of claim 9, wherein the protein of interest comprises a variable domain of an immunoglobulin.

33. (New) The eukaryotic cell of claim 32, wherein the protein of interest is an immunoglobulin.

34. (New) The eukaryotic cell of claim 33, wherein the protein of interest is a monoclonal antibody.

35. (New) The eukaryotic cell of claim 9, wherein the protein of interest is erythropoietin, or a functional derivative, homologue or fragment thereof.

36. (New) The eukaryotic cell of claim 9, wherein the protein of interest is a viral protein other than an adenoviral protein.

37. (New) The eukaryotic cell of claim 36, wherein the viral protein is selected from the group consisting of an influenza virus neuramidase, an influenza virus hemagglutinin, an enterovirus protein or an epitope thereof, a herpes virus protein or an epitope thereof, an orthomyxovirus protein, a retrovirus protein, a parvovirus protein, a papovavirus protein, a rotavirus protein, a coronavirus protein, a togavirus protein, a rubella virus protein, an Eastern-equine encephalomyelitis virus protein, a Western-equine encephalomyelitis virus protein, a Venezuelan equine encephalomyelitis virus protein, a hepatitis causing virus protein, a hepatitis A protein, a hepatitis B virus protein, a pestivirus protein, a hog cholera virus protein, a rhabdovirus protein, a rabies virus protein, and antigenic fragments of any thereof.

38. (New) The eukaryotic cell of claim 9, wherein the recombinant nucleotide sequence encoding the protein of interest in expressible format comprises the sequence encoding the protein of interest under control of a cytomegalovirus (CMV) promoter.

39. (New) A cell culture comprising the eukaryotic cell of claim 9, together with a suitable medium.

40. (New) The cell culture of claim 39, wherein the cell culture is a suspension culture.

41. (New) The cell culture of claim 39, wherein the suitable medium is free of animal- or human-derived serum and animal- or human-derived serum components.

42. (New) The process of claim 21, wherein the protein of interest comprises a variable domain of an immunoglobulin.

43. (New) The process of claim 42, wherein the protein of interest is an immunoglobulin.

44. (New) The process of claim 43, wherein the protein of interest is a monoclonal antibody.

45. (New) The process of claim 21, wherein the protein of interest is erythropoietin, or a functional derivative, homologue or fragment thereof.

46. (New) The process of claim 21, wherein the protein of interest is a viral protein other than an adenoviral protein.

47. (New) The process of claim 46, wherein the viral protein is selected from the group consisting of an influenza virus neuramidase, an influenza virus hemagglutinin, an enterovirus protein or an epitope thereof, a herpes virus protein or an epitope thereof, an orthomyxovirus protein, a retrovirus protein, a parvovirus protein, a papovavirus protein, a rotavirus protein, a coronavirus protein, a togavirus protein, a rubella virus protein, an Eastern-equine encephalomyelitis virus protein, a Western-equine encephalomyelitis virus protein, a Venezuelan equine encephalomyelitis virus protein, a hepatitis causing virus protein, a hepatitis A protein, a hepatitis B virus protein, a pestivirus protein, a hog cholera virus protein, a rhabdovirus protein, a rabies virus protein, and antigenic fragments of any thereof.

48. (New) The process of claim 26, wherein the protein of interest is a human protein.

49. (New) The process of claim 26, wherein the protein of interest comprises a variable domain of an immunoglobulin.

50. (New) The process of claim 49, wherein the protein of interest is an immunoglobulin.

51. (New) The process of claim 50, wherein the protein of interest is a monoclonal antibody.

52. (New) The process of claim 26, wherein the protein of interest is erythropoietin, or a functional derivative, homologue or fragment thereof.

53. (New) The process of claim 26, wherein the protein of interest is a viral protein other than an adenoviral protein.

54. (New) The process of claim 53, wherein the viral protein is selected from the group consisting of an influenza virus neuramidase, an influenza virus hemagglutinin, an enterovirus protein or an epitope thereof, a herpes virus protein or an epitope thereof, an orthomyxovirus protein, a retrovirus protein, a parvovirus protein, a papovavirus protein, a rotavirus protein, a coronavirus protein, a togavirus protein, a rubella virus protein, an Eastern-equine encephalomyelitis virus protein, a Western-equine encephalomyelitis virus protein, a Venezuelan equine encephalomyelitis virus protein, a hepatitis causing virus protein, a hepatitis A protein, a hepatitis B virus protein, a pestivirus protein, a hog cholera virus protein, a rhabdovirus protein, a rabies virus protein, and antigenic fragments of any thereof.

55. (New) The process of claim 26, wherein the recombinant nucleotide sequence encoding the protein of interest in expressible format comprises the sequence encoding the protein of interest under control of a cytomegalovirus (CMV) promoter.

56. (New) The process of claim 26, wherein the suitable medium is free of animal- or human-derived serum and animal- or human-derived serum components.